

REMARKS/ARGUMENTS

The examiner has rejected claims 1-9 under 35 U.S.C. § 103(a) as being unpatentable over Yabuki et al. In rejecting the claims the examiner urges that Yabuki teaches an alloy composition which comprises C, Cr, Fe, W, Mo, Ti, Al, and Ni in amounts which overlap the composition recited in applicant's claims.

The examiner acknowledges that Yabuki does not teach the same proportions as recited in applicant's claims and further acknowledges that Yabuki does not disclose or suggest "a weight member for a golf club head". Furthermore the examiner also acknowledges that Yabuki is silent with respect to the "precision casting" process recited in the claims. The examiner argues that it would be obvious to select any portion of the claimed ranges from the overlapping ranges disclosed by the prior art to arrive at applicant's invention. The examiner also argues that no patentable weight has been given to the term "weight member for a golf club head" since this phrase does not limit the claim to any particular structure that distinguishes the invention from the alloy disclosed by the cited reference. Lastly the examiner argues that the term "precision casting" is a process limitation which is not a relevant consideration in determining the patentability of a product by process claim.

In response to this rejection applicant has amended claim 1. Amended claim 1 is characterized in that a weight member is made of WFeNi alloy which comprises 15-40 wt. % iron, 30-60 wt. % nickel, 15-30 wt. % tungsten, 1.5-10 wt. % chromium and 0.5-5.0 wt. % molybdenum. The weight member employs tungsten to adjust the total weight of the golf club head, and employs chromium ranging between 1.5 to 10 wt. % to avoid precipitating the pearlite structure in the γ (iron, nickel) phase of the weight member and to reduce manufacturing costs.

In contrast, Yabuki teaches an alloy comprising 0.1-17 wt. % tungsten and 10-28 wt. % chromium for making a valve assembly for an engine, not for making a weight member of a golf club head.

The entire range of tungsten disclosed by Yabuki (i.e., 0.1-17 wt. %) is unsuitable for making a weight member having an appropriate weight for a weight member of a golf club head. Furthermore, Yabuki discloses that the chromium content is from 10-28%. Applicant submits that exceeding 10 wt. % chromium causes an **increase** of the manufacturing cost that is only acceptable in manufacturing an engine but is clearly unsuitable for the weight member of a golf club head.

Applicant further submits that the examiner must consider all of the claimed limitations and, in particular, cannot ignore the limitation which requires that the invention is "a weight member for a golf club head". Contrary to the examiner's observation, a weight member for a golf club head is a well known term of art which describes a specific article of manufacture known to those skilled in this field of technology. In this regard it is to be noted that weight members for golf club heads are described in the prior art as specific articles of manufacture. For example, U.S. patent nos. 6,508,978 and 6,475,427 describe such weight members for golf club heads. It is noted in these patents that weight members are sized to fit within a precise location of a golf club head. It is further noted in these patents that an economical method for making such a weight member is to cast a golf club head body with a cavity for the weight member and attaching the weight member with a screw. These patents also describe a co-casting process in which the weight member is incorporated in the mold prior to pouring the base metal.

It is also clear from applicant's specification that such weight members are well known as specific articles of manufacture. In this regard it is noted in the first full sentence on page 3 of the specification that the weight member is embedded into a bottom surface of a golf club head body. It is also noted in the first sentence on page 2 of the specification that the weight member is embedded or welded to a golf club head body. It is noted in the sentence bridging pages 3-4 of the specification that the weight member is mounted to the surface of a golf club head body and in the first full sentence on page 9 it is stated that the weight member is directly engaged to (particularly by embedding) the surface of the golf club head body and then polished. In other words the weight member is a component of the resultant gold club head since the weight member is engaged (e.g., embedded) with the head body to form the head.

In view of the above, it is clear that the limitation "weight member for a golf club head" must be considered as a specific article of manufacture. Furthermore, since the cited reference is not in any way concerned with the field of technology pertaining to golf clubs, it is self-evident that one skilled in the art would not be motivated to modify the valve assembly device of Yabuki to produce the claimed weight member for a golf club head.

Moreover, it is clear from the examiner's remarks that he has not considered the specific limitations contained in the dependent claims. In particular, the examiner has failed to consider the limitation of claim 3 which recites that the golf club head **further comprises silicon**. While the maximum amount of silicon is limited in claim 3, the claim nonetheless positively recites that the weight member does indeed comprise silicon. The examiner has failed to make any finding of fact concerning the obviousness of adding silicon to the alloy

of Yabuki et al. In this regard it is to be noted that the alloy mentioned by the examiner on page 2 of the office action does not include silicon.

The same reasoning also applies to the additional ingredients recited in claims 4, 5, 8 and 9.

In view of the above, it is clear that claim 1 is distinguished over the cited reference and the dependent claims which require additional alloying components are further distinguished over the cited reference.

Applicant has added new claims 10 and 11 to the application. Claim 10 is directed toward a weight member **having a configuration for engagement with a golf club head** and claim 11 is more specifically directed toward a golf club head which comprises a weighted member engaged therewith as a component thereof. It is clear from the above-discussed portions of applicant's specification which refer to the weight member, that the invention pertains to a weight member which is configured for engagement with a golf club head and the invention also includes the resultant golf club head.

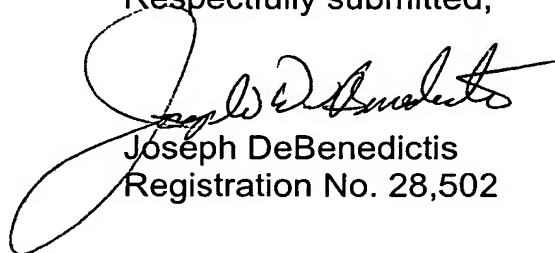
In view of the above it is clear that Yabuki et al. which pertains to an automotive valve assembly does not disclose or suggest applicant's claimed weight member having the configuration of claim 10 nor the golf club head of claim 11. In addition, claims 10 and 11 further require that the precision casting procedure takes place under conditions to prevent a pearlite structure from being precipitated in the γ (iron, nickel) phase of the WFeNi alloy as set forth on page 3, lines 7-22 of the specification.

U.S. Pat. Appl. 10/611,996

In view of the above arguments and amendment to the claims, applicant respectfully requests reconsideration and allowance of all the claims which are currently pending in the application.

Respectfully submitted,

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Joseph DeBenedictis
Registration No. 28,502

BACON & THOMAS
625 Slaters Lane, Fourth Floor
Alexandria, Virginia 22314
Phone: (703) 683-0500

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